DATE OUT: 01/AUG/2012

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: TGAI [x]; MUP [ ]; EUP [ ]
BARCODE NO.: D403172 **REG./FILE SYMBOL NO.:** 5481-218
PRODUCT NAME: Naphthaleneacetic Acid, Sodium Salt **MRID NO.:** 488507-01
COMPANY NAME: AMVAC Chemical Corporation **ACTION CODE:** 676

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INTRODUCTION:

With this resubmission, in response to our review dated 5/15/12, AMVAC Chemical Corporation provided MRID number 488507-01 described as "FINAL REPORT" with a study title "1-Naphthaleneacetic acid sodium salt (Purified): Physico-chemical properties" which contains additional product chemistry data on the subject product.

The registrant is requesting reregistration of their product, EPA Reg. No. **5481-218**.

FINDINGS:

1. The data presented in MRID number 488507-01 are summarized in the tables on page 2 of this DER. The information pertaining to the Group A requirements (identity and analytical method for the active ingredient) are acceptable. The data pertaining to some of the group B requirements (physical state, color, UV/Vis absorption, thermal stability, [stability to elevated temperature], relative density, vapor pressure, water and organic solvent solubility, dissociation constant, and partition coefficient) are acceptable.

   Previous reviews on the subject product (dated 6/25/10, 1/12/12, and 5/15/12) have identified GRN 830.6313 (Stability to Normal and Elevated Temperatures, Metals, and Metal Ions) as the only remaining deficient data. Nevertheless, the registrant's new set of data will be reviewed here and the results are incorporated with the previously reviewed and accepted data (MRID numbers 473545-01, -02, -03, -04, -05, -06, 405230-02, -03, 441006-02, and 474786-11). The new data submitted now completes all product chemistry requirements for the reregistration of the subject product.

2. As noted in Finding 1d of the review dated 5/15/12, the Ingredients Statement on the draft label will have to be changed to 93.58% for compliance with 40 CFR §156.10(g) and PR Notice 91-2. No data are present to trigger the need for a Physical or Chemical Hazards Statement. The Storage and Disposal Statements are acceptable in accordance with 40 CFR §156.10(i)(2)(ix) and PR Notice 83-3.

CONCLUSIONS:

The registrant has now satisfied the product chemistry requirements for the reregistration of EPA Reg. No. **5481-218**.

Product Chemistry Data

Group A: Guidelines Series 830.1550 - 830.1800 (40 CFR §158.320 - 158.355)
Product Identity, Composition, and Analysis

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	40 CFR §	MRID Number	Data Fulfilled
830.1550 Product Identity and Composition	158.320	473545-01, 488507-01, CSF	Y
830.1600 Description of Materials Used to Produce the Product	158.325	473545-02	Y
830.1620 Description of Production Process	158.330	453545-03	Y
830.1650 Description of Formulation Process	158.335	N/A	
830.1670 Discussion of Formation of Impurities	158.340	473545-04	Y
830.1700 Preliminary Analysis	158.345	473545-05	Y
830.1750 Certified Limits	158.350	473545-06	Y
830.1800 Enforcement Analytical Method	158.355	405230-02, 473545-05, 488507-01	Y

Subgroup B: Series 830.6302 - 7950 (40 CFR §158.310)
Physical and Chemical Properties

GUIDELINE REFERENCE NO. (GRN)/ TITLE 830	VALUE OR QUALITATIVE DESCRIPTION	MRID number	Data Fulfilled
.6302 Color	White to cream; white	405230-03, 488507-01	Y
.6303 Physical State	Amorphous to crystalline powder; white powder	405230-03; 488507-01	Y
.6313 Stability to normal and elevated temperatures, metals and metal ions	Stable for 1 year at ambient storage conditions (packaged in plastic bags placed in cardboard tubes)	441006-02	Y

	"No decomposition or chemical transformation occurred below 150°C, consequently the test substance was considered stable." (the study was conducted using a high pressure sealed aluminum pan)	488507-01	
.6304 Odor	Odorless	405230-03	Y
.6314 Oxidation/Reduction: Chemical Incompatibility	N/A		
.6315 Flammability/Flame Extension	N/A		
.6316 Explodability	N/A		
.6317 Storage Stability	Stable for 1 year at ambient storage conditions	441006-02	Y
.6318 Viscosity	N/A		
.6319 Miscibility	N/A		
.6320 Corrosion Characteristics	Not corrosive to the commercial packaging material	441006-02	Y
.6321 Dielectric Breakdown Voltage	N/A		
.7000 pH	9.1 (1 % solution in water)	405230-03	Y
.7050 UV/Visible light absorption	Spectra at pH > 9	474786-11	Y
. 7200 Melting Point /Melting Range	> 300 °C	405230-03	Y
.7300 Density/Relative Density	3.85 lb/gal (packed bulk density) Relative Density: 1.391	405230-03 488507-01	Y
.7560 Octanol/Water Partition Coefficient	At pH 3, the test substance eluted as a single component with a retention time corresponding to a log P_{ow} value of +4.11, which was within a 95% confidence range of +3.87 to +4.38.	488507-01	Y

.7840 Solubility	Water: 295.5 g/L at 20.1°C p-xylene: 0.3592 mg/L at 20.1°C n-heptane: 0.1520 mg/L at 20.1°C 1,2-dichloromethane: 7.033 mg/L at 20.1°C Ethyl acetate: 31.57 mg/L at 20.1°C Acetone: 133.7 mg/L at 20.1°C Methanol: 274.1 g/L at 20.1°C	488507-01	Y
.7950 Vapor Pressure	2.0×10^{-4} Pa at 25°C	488507-01	Y